(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 9 June 2005 (09.06.2005)

PCT

(10) International Publication Number $WO\ 2005/051870\ A3$

- (51) International Patent Classification⁷: C07D 237/26, G01N 21/76
- (21) International Application Number:

PCT/BR2004/000236

(22) International Filing Date:

25 November 2004 (25.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PI0307864-7 25 November 2003 (25.11.2003) BR

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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 7 July 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HYDRAZIDES AND DERIVATIVES PRODUCTION PROCESS FROM HYDRAZINES AND DICARBOXYLIC ACIDS

(57) Abstract: The present invention describes a process to form hydrazides from the reaction of a hydrazine and a dicarboxylic, using a Lewis acid as a main reagent of the reaction. The reaction occurs in a safe reactional environment, utilizing smooth conditions, neither involving high temperatures nor high pressures, producing the desired products with high yields, between 90-95%. The invention also describes a kit for utilization of chemiluminescent substances, comprised of two solutions.



INTERNATIONAL SEARCH REPORT

International application No. PCT/BR 2004/000236

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C07D 237/26, G01N 21/76,

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷: C07D 237/00, G01N 21/76

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPI, Epodoc

EP 1203587 A1(ABIDOV et al.) 8 May 2002 (08.05.2002)	1 10
claim 2.	1-10
	
EP 313919 A2(ABOTT LABORATORIES) 3 May 1989 (03.05.1989) page 4, lines 4-33, examples 6, 11.	1-10
	
US 4226993 A (BUCKLER et al) 7 October 1980 (07.10.1980) claims 1, 2, column 15, compounds 11, 12.	1-10

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Date of the actual completion of the international search 9 May 2005 (09.05.2005)	Date of mailing of the international search report 31 May 2005 (31.05.2005)			
Name and mailing address of the ISA/AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna	Authorized officer MÜLLER-HIEL R.			

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Facsimile No. +43 / 1 / 534 24 / 535

INTERNATIONAL SEARCH REPORT

nternational application No. PCT/BR 2004/000236

Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
JP 8285844 A(Fuchigami) 1 November 1996 (01.11.1996) (abstract) <online><retrieved 2005="" 5="" 6="" on=""> Retrieved from : EPOQUE PAJ Database</retrieved></online>	11-20
	Retrieved from : EPOQUE PAJ Database

INTERNATIONAL SEARCH REPORT

Intormation on patent family members

Inte nal application No.
PCT/BR 2004/000236

Patent document cited in search report			Publication date	Patent family member(s)			Publication date
EP	A1	A1 1203587	2002-05-08	BG	A	106394	2002-12-29
				US	A1	2002198208	2002-12-26
				WO	A1	0172305	2001-10-04
				EA	B1	4056	2003-12-25
				CZ	A3	20020235	2002-05-15
EP	A	313919		JP	A	1149773	1989-06-12
				ΑÜ	A	2440288	1989-05-25
				EP	A2	0313919	1989-05-03
JP	A	8285844A 2				none	
US	A	4226993	**********	CA	A2	1147737	1983-06-07
				CA	A2	1147336	1983-05-31
				US	Α	4297273	1981-10-27
				FR	A1	2433517	1980-03-14
				JP	A	55018996	1980-02-09
				DE	A1	2928048	1980-02-07